Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules	)	GN Docket No. 11-117
Wireless E911 Location Accuracy Requirements	)	PS Docket No. 07-114
E911 Requirements for IP-Enabled Service Providers	)	WC Docket No. 05-196

REPLY COMMENTS OF METROPCS COMMUNICATIONS, INC.

MetroPCS Communications, Inc. ("MetroPCS"),[1] by its attorneys, hereby respectfully submits its reply to the comments submitted in response to the *Notice of Proposed Rulemaking* and *Second Further Notice of Proposed Rulemaking* (collectively the "*NPRM*")[2] released by the Federal Communications Commission (the "FCC" or "Commission") in the above-captioned proceedings.

In reply, the following is respectfully shown:

[1] For purposes of these Comments, the term "MetroPCS" refers to MetroPCS Communications, Inc. and all of its FCC license-holding subsidiaries.

[2] *Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules*; *Wireless E911 Location Accuracy Requirements*; *E911 Requirements for IP-Enabled Service Providers*, Notice of Proposed Rulemaking, Third Report and Order, and Second Further Notice of Proposed Rulemaking, FCC 11-107, GN Docket No. 11-117, PS Docket No. 07-114, WC Docket No. 05-196 (rel. Jul. 13, 2011) ("*NPRM*").

I. INTRODUCTION

In its comments, MetroPCS commended the Commission's review of the current E911 system, which has proved to be very valuable, and the Commission's consideration of ways to improve its functionality. One area of the *NPRM* that drew considerable comment relates to indoor location accuracy. In reviewing the comments of other interested parties, MetroPCS was not surprised to find that the vast majority of commenters recognize the significant technical challenges that exist with indoor location accuracy testing. A consensus, however, is forming that the proper agency to develop technical recommendations for indoor location accuracy testing is the Communications Security, Reliability and Interoperability Council ("CSRIC").[3] MetroPCS supports the Commission's decision to defer the development of voluntary indoor location accuracy methods, tools, and testing processes to CSRIC.[4] In the meantime, the Commission should refrain from imposing a mandated testing requirement for wireless service providers, and rather, should allow industry groups working with CSRIC to develop voluntary guidelines and standards. As was demonstrated by the numerous commenters, indoor testing presents unique technical problems best suited to flexible standards that may be quickly adjusted and updated to reflect new and evolving technology. In MetroPCS' view, industry-led and endorsed efforts are the best way to meet this challenge and to ensure that such testing can be undertaken.

---

[3] Alliance for Telecommunications Industry Solutions Comments at 5 – 6; APCO International Comments at 8; AT&T Inc. Comments at 7 ("AT&T Comments"); Cellular Specialties, Inc. Comments; CTIA - The Wireless Association Comments at 2 – 5 ("CTIA Comments"); Motorola Mobility Comments at 9; Qualcomm Comments at 9; Sprint Nextel Comments at 8 – 9; T-Mobile USA Comments at 7 ("T-Mobile Comments"); Telecommunications Industry Association Comments at 11; TeleCommunication Systems, Inc. Comments at 12 – 13; Verizon and Verizon Wireless Comments at 28 ("Verizon Comments").

[4] *NPRM* at ¶ 88.

II. THE COMMISSION SHOULD DEFER THE DEVELOPMENT OF INDOOR ACCURACY TESTING RECOMMENDATIONS TO CSRIC

As demonstrated by the comments of many interested parties, there are numerous complex technical issues involved with indoor accuracy testing. As a result, MetroPCS applauds the Commission for recognizing the need for further investigation in this area and deferring such investigation to CSRIC. A few commenters have requested that the Commission immediately begin mandating testing requirements for indoor location accuracy compliance.[5] However, MetroPCS believes any such mandate is premature. It is not appropriate to adopt mandatory requirements at a time when new testing methodologies need to be developed and tailored specifically for indoor requirements. At this time, relying on testing approaches fashioned for outdoor usage would be a mistake.[6] For example, if outdoor testing procedures were applied to indoor environments, a carrier would have to enter the actual indoor testing site. This could very well pose a problem as providers do not have the ability to access certain indoor private properties to conduct these tests. Limiting the tests to publicly available space would not suffice; testing locations would need to be truly random for the results to be statistically meaningful. Additional technological challenges also are presented. As discussed by numerous commenters, the Alliance for Telecommunications Industry Solutions ("ATIS") recently released a study demonstrating the critical technological complexities and challenges that that must be taken into account with indoor accuracy testing procedures.[7] Further study may well conclude that indoor location accuracy testing requires different technology than is used with outdoor testing. Moreover, at least one commenter has suggested that new handset and other technology may

---

[5] TruePosition, Inc. Comments.

[6] *Cf. NPRM* at ¶ 84.

[7] *See* AT&T Comments at 7; CTIA Comments at 3.

improve accuracy indoors.[8] These new technologies should also be part of any study to determine whether they offer any benefits over existing location methods. Consequently, MetroPCS recommends that CSRIC and any other industry groups involved in this development, consult the ATIS report in making their recommendations.[9]

III. ANY RECOMMENDED TESTING STANDARDS AND PROCEDURES SHOULD BE DEVELOPED BY INDUSTRY-LED EFFORTS AND BE VOLUNTARY FOR WIRELESS SERVICE PROVIDERS

The Commission should refrain from implementing an indoor location accuracy testing mandate at this time and allow CSRIC to complete its investigation.[10] However, once CSRIC does compile enough information to develop appropriate recommendations, MetroPCS believes that any testing approaches should be voluntary for wireless service providers due to the technical challenges and costly nature of such requirements. CTIA has suggested that the imposition of any standards or procedures "should be left to the industry and Public Safety community to develop guidelines that can be effectively implemented and rapidly updated to reflect changing technologies."[11] MetroPCS agrees with CTIA and supports the promotion of industry-led efforts as the appropriate approach to developing eventual indoor location accuracy testing standards. Technologically complex issues such as these constantly require quick and efficient updates, and may be best approached by those groups that are encountering these

---

[8] T-Mobile Comments at 8.

[9] *See* AT&T Comments at 7; CTIA Comments at 3.

[10] *Cf.* Commlabs, Inc. Comments at 16.

[11] CTIA Comments at 4. Notably, the Commission recently endorsed voluntary industry standards to address issues of "bill shock" and, in doing so, acknowledged the benefits of such an approach. *See* Julius Genachowski, Chairman, Fed. Commc'n Comm'n, Address at the Brookings Institution Bill Shock Event (Oct. 17. 2011) http://www.fcc.gov/document/chairman-genachowski-remarks-bill-shock-event.

problems first-hand.[12] Further, any such testing needs to be tailored to the particular service. For example, a service designed to operate mainly outdoors should not have to meet the same standards as one designed for noisy indoor radio frequency environments. A one-size-fits-all approach incorrectly assumes that all services are designed and intended to be used in the same fashion, which is simply not true.

Moreover, any adopted standards or procedures should be flexible, and voluntarily implemented by wireless service providers. As noted by Verizon, "the limitations of A-GPS technologies in indoor GPS-denied environments are well understood, so the principal impact of mandatory indoor testing at regular intervals would be to drain carriers' resources with little countervailing prospect of accuracy improvement."[13] The benefits of indoor location accuracy testing has not yet been proven to outweigh the significant costs that will be borne by providers.[14] Indeed, the Commission has noted that it will take into account the cost effectiveness of any recommendations, and in doing so, should consider the ample support in the record indicating that such testing would be costly to wireless providers.[15] As Motorola Mobility states, "applying a new indoor testing requirement on service providers would be unduly burdensome and would fail to provide enough useful data to justify the expense and hardship."[16]

---

[12] *See* CTIA Comments at 4.

[13] Verizon Comments at 28.

[14] President Barack Obama issued an Executive Order on July 11, 2011 which called on federal agencies, *inter alia*, to use the "least burdensome tools for achieving regulatory ends," by conducting both quantitative and qualitative cost-benefit analyses. Exec. Order No. 13579, 76 FR 41587 (Jul. 14, 2011), *available at* http://www.gpo.gov/fdsys/pkg/FR-2011-07-14/pdf/2011-17953.pdf.

[15] *See NPRM* at ¶ 88; AT&T Comments at 7; Motorola Mobility Comments at 9; Verizon Comments at 28.

[16] Motorola Mobility Comments at 9.

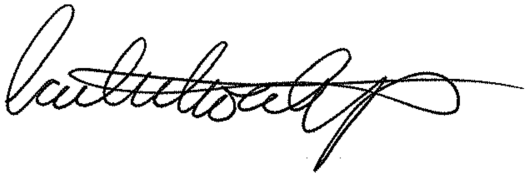
Therefore, before any standards or procedures are implemented – whether developed by the Commission or industry groups – the Commission should conduct a cost-benefit analysis of indoor location accuracy testing requirements with respect to wireless service providers.

IV. CONCLUSION

Indoor location accuracy testing has presented a complex problem for the wireless industry; one that cannot be solved simply by relying upon testing procedures adopted for outdoor locations. MetroPCS supports the Commission's decision to defer the investigation and development of technical recommendations to CSRIC. When CSRIC completes its investigation and presents its findings and recommendations to the Commission, MetroPCS urges the Commission to allow industry groups to design and implement voluntary standards and guidelines for compliance by wireless service providers. Through the cooperation between the Commission, industry groups and public safety personnel, new industry-designed guidelines will enhance location accuracy testing and further improve the E911 system.

Respectfully submitted,

MetroPCS Communications, Inc.



By:
Carl W. Northrop
Michael Lazarus
Andrew Morentz
Jessica DeSimone
TELECOMMUNICATIONS LAW
PROFESSIONALS PLLC
875 15th Street, NW, Suite 750
Washington, DC 20005

Telephone: (202) 789-3120
Facsimile: (202) 789-3112

Mark A. Stachiw
General Counsel, Secretary
& Vice Chairman
MetroPCS Communications, Inc.
2250 Lakeside Blvd.
Richardson, Texas 75082
Telephone: (214) 570-5800
Facsimile: (866) 685-9618

Its Attorneys

November 2, 2011